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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,083	06/25/2001	Hisaki Miyamoto	P20983	8590

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EXAMINER

MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/887,083

Applicant(s)

MIYAMOTO ET AL.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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- 1) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 2) Claims 1-4, 6-8 and 14-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the limitation of "a high air pressure source that supplies air pressure to said contact pins" (claim 1) and "supplying high pressure air to said contact pins" (claim 14).

Page 43 of the original disclosure, which contains no explicit description of the above quoted language, discloses "air is sent by the pump 41 to cylinder 40, thereby extending the cylinder 40 and pushing the pin 39 in the direction of the outside circumference of the lower and upper substrates". However, the original disclosure fails to reasonably convey supplying high pressure air to the pins 39 instead of cylinder 40.

- 3) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 4) Claims 1-4, 6-8 and 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 14, the scope and meaning of each of "a high air pressure source that supplies air pressure to said contact pins" (claim 1) and "supplying high pressure air to said contact pins" (claim 14) is ambiguous. It is unclear if this language requires direct contact of the air and the contact pins or something else. Also, the scope and meaning of "high pressure" (a relative term) is unclear; the original disclosure providing no guidance as to the definition of this relative term.

- 5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 6) **Claims 1, 3, 4, 6, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '178 (EP 706178) in view of Japan '234 (JP 4-57234) and Japan '137 (JP 63-213137).**

Europe '178, directed to method and apparatus for making a laminated optical disc, discloses providing a first disc and a second disc, applying adhesive in a donut shape to the first disc, superimposing the second disc on the first disc, rotating the discs to spread the adhesive and subjecting the adhesive to UV to cure the adhesive. See figures 3A, 3B, 3C and 3D and description thereof. The adhesive is applied using a "adhesive applying device" / "adhesive applier" which is schematically illustrated in

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figure 3A. The second disc is superimposed on the first disc by a "superimposing means" / "laminator" (e.g. robot 41, transporter 45). See figure 4 and description thereof. Europe '178 does not recite a centering device.

As to claims 1 and 14, it would have been obvious to one of ordinary skill in the art to center the discs using the claimed centerer with at least two pins in Europe '178's process / apparatus of manufacturing a laminated optical disc such that "high pressure air is supplied to the pins from a high pressure air source" in view of Japan '234 and Japan '137's suggestion to use centering means comprising movable "positioning pins" to accurately position the center of an optical disc substrate during a method of manufacturing an optical disc wherein Japan '234 specifically suggests moving positioning pins radially to *align the center holes of optical disc substrates to be laminated* and Japan '137 specifically suggests **using an air cylinder** to cause positioning pins to move radially. Hence: Europe '178 and Japan '234 teach bonding two optical disc substrates together using adhesive. Japan '234 evidences that such optical disc substrates should be aligned by radially moving pins. Japan '234 does not appear to disclose using an air cylinder to cause the positioning pins to radially move. However, Japan '137 evidences that it well known in the same art of manufacturing an optical disc to use an air cylinder to radially move pins for positioning the center hole of an optical disc substrate. The applied secondary art therefore suggests modifying Europe '178 by using radially movable positioning pins to align the optical substrates (Japan '234) and using an air cylinder to radially move positioning pins for an optical

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disc substrate (Japan '137). No unexpected results of causing less damage have been shown.

As to claims 3 and 4, note Europe '178's teaching to apply the adhesive using an adhesive applying means as shown in figure 3A. Europe '178 teaches that the adhesive is UV curable.

As to claim 6, the limitation of spreading the claimed annular mound of adhesive would have been obvious in view of Europe '178's teaching to spread a donut of adhesive.

As to claim 16, note Europe '178's teaching to cure the adhesive. Claim 16 reads on curing all of the adhesive instead of only at a location in proximity to the hole.

7) **Claims 2, 7, 8, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '178 (EP 706178) in view of Japan '234 (JP 4-57234) and Japan '137 (JP 63-213137) as applied above and further in view of Japan '630 (JP 4-139630).**

As to claims 2, 7, 8, 15-17, it would have been obvious to provide Europe '178's optical disc laminating method / apparatus, which has a bonding device (UV source), with the claimed provisional bonding device / warping prevention device since Japan '630, also directed to making a laminated optical disc, suggests tentatively fixing discs before final bonding by applying UV through transparent parts 5b of the device indicated in figure 1(3) to prevent generation of focusing and tracking defect.

- 8) **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '178 (EP 706178) in view of Japan '234 (JP 4-57234) and Japan '137 (JP 63-213137) as applied above and further in view of Komori et al (US 5227213).**

As to claim 4, it would have been obvious to adapt the apparatus to apply a thermoplastic adhesive in view of Europe '178's teaching to apply a UV curable adhesive to form a laminated optical disc and Komori et al's teaching to use a hot melt (thermoplastic) UV curable adhesive to form a laminated optical disc.

- 9) **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '178 (EP 706178) in view of Japan '234 (JP 4-57234) and Japan '137 (JP 63-213137) as applied above and further in view of Japan '786 (JP 8-36786).**

As to claim 6, the limitation of spreading the claimed annular mound of adhesive would have been obvious as noted above in view of Europe '178's teaching to spread a donut of adhesive and Japan '786's teaching to spread an annular mound of adhesive as shown in figures 1-2.

Remarks

- 10) Applicant's arguments with respect to claims 1-4, 6-8, 14-17 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 10-30-03 have been fully considered but they are not persuasive.

The obvious type double patenting rejections have been withdrawn because claims 5, 9-13 and 18-19 have been canceled.

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A partial oral translation by a PTO translator of Japan '242 (previously applied) was obtained by the examiner, but no disclosure of supplying air pressure / use of an air cylinder to move the terminals 4 was found by the PTO translator.

As to the added subject matter relating to supplying air pressure to the pins, note the new ground of rejection using newly cited Japan '137 which teaches using an air cylinder 3 to move lugs (pins) 6.

11) No claim is allowed.

12) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

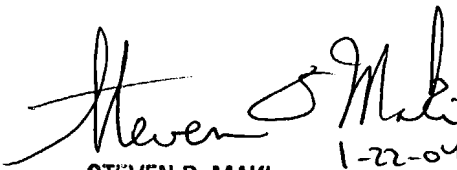
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Steven D. Maki
January 22, 2004


STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
A 1733
1-22-04